



Jobbnorge ID: 206309
Deadline: 6/27/2021
Website: <https://uit.no/startside>
Scope: Fulltime
Duration: Fixed Term

Faculty of Science and Technology

PhD Fellow in Machine Learning/Computer Vision

The position

An exciting PhD position is available in the UiT Machine Learning Group at the Department of Physics and Technology.

- Goal: Develop new algorithms for learning from limited labelled data
- Start date: Fall 2021
- Duration: The appointment and nominal length of the PhD program is 3 years
- Salary: 481 800 NOK per year

The position is for a period of three years. The objective of the position is to complete research training to the level of a doctoral degree. Admission to the PhD programme is a prerequisite for employment, and the programme period starts on commencement of the position.

The workplace is at UiT in Tromsø. You must be able to start in the position in Tromsø within a reasonable time, and within 6 months after receiving the offer.

The position's field of research

The PhD fellowship is offered in the context of a Research Council of Norway (RCN) FRIPRO grant that focuses on learning from limited labels. FRIPRO is the RCNs funding for basic research and ground-breaking projects and supports the most talented researchers in Norway. The successful candidate will be a part of the [UiT Machine Learning Group](#) and will also be affiliated with the newly established [Research Center Visual Intelligence](#).

In this context, we are seeking a PhD Fellow to take an active role in the group's research on developing novel machine learning/computer vision methodology. While deep learning has revolutionized the field of machine learning and computer vision in the past years, a large focus has been on scenarios where abundant labeled data is available. As it is often infeasible to collect these large amounts of training data, special focus in this project will be on the development of deep learning methodology for learning from limited labeled data, such as few-shot/zero-shot/semi-supervised /self-supervised learning, domain adaptation, and/or deep clustering.

The position will be part of the already ongoing effort to design deep learning methodology for limited labeled data and will synergize well with some of our recent work [1-3].

References

- [1] Trosten, D. J., Løkse, S., Jenssen, R., & Kampffmeyer, M. (2021). Reconsidering Representation Alignment for Multi-view Clustering. In Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition 2021.
- [2] Nguyen, N., Løkse, S., Wickstrøm, K., Kampffmeyer, M., Roverso, D., & Jenssen, R. (2020). SEN: A Novel Feature Normalization Dissimilarity Measure for Prototypical Few-Shot Learning Networks. In Proceedings of the European Conference on Computer Vision.
- [3] Kampffmeyer, M., Chen, Y., Liang, X., Wang, H., Zhang, Y., & Xing, E. P. (2019). Rethinking knowledge graph propagation for zero-shot learning. In Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition 2019.

Contact

Further information about the position and UiT is available by contacting the principal supervisor and FRIPRO project leader Associate Professor Michael Kampffmeyer,

- phone: +47 90602098
- email: michael.c.kampffmeyer@uit.no

Location

The UiT Machine Learning Group is located in Tromsø, a lively town with approximately 75.000 inhabitants. It is known for its beautiful scenery, northern lights, midnight sun, as well as the northernmost university in the world and well connected to the rest of Europe. Located on an island surrounded by fjords and mountains, Tromsø is a major cultural hub within the Arctic Circle and a great spot for outdoor activities (hiking, skiing, etc.).

Qualifications

The position requires a Master's degree in physics, mathematics, statistics or machine learning. The suitable candidate should have experience with deep learning. A good background in machine learning, or related fields such as pattern recognition or computational statistics, is required. Candidates with research experience and prior publications in Deep Learning, Computer Vision, and related fields will be considered with higher priority.

We are looking for an interested, active and highly motivated candidate, who likes to explore new technologies, is both independent thinking and also enjoys working in a collaboration with others.

Good communication skills in English are necessary and documented fluency in English is required.

During this assessment process, emphasis will be put on your potential for research as shown by the Master's thesis and any other academic works. In addition, we may consider work experience or other activities of significance for the PhD studies. The assessment will emphasize motivation and personal suitability for the position.

As many as possible should have the opportunity to undertake organized research training. If you already hold a PhD or have equivalent competence, we will not appoint you to this position.

Admission to the PhD programme

For employment in the PhD position, you must be qualified for admission to the PhD programme at the [Faculty of Science and Technology](#) and participate in organized doctoral studies within the employment period.

Admission normally requires:

- A bachelor's degree of 180 ECTS and a master's degree of 120 ECTS, or an integrated master's degree of 300 ECTS.
- A master's thesis with a scope corresponding to at least 30 ECTS for a master's degree of 120 ECTS.
- A master's thesis with a scope corresponding to at least 20 ECTS for an integrated master's degree of 300 ECTS.

In order to gain admission to the programme, the applicant must have a grade point average of C or better for the master's degree and for relevant subjects of the bachelor's degree. A more detailed description of admission requirements can be found [here](#).

Applicants with a foreign education will be subjected to an evaluation of whether the educational background is equal to Norwegian higher education, following national guidelines from [NOKUT](#).

If you are employed in the position, you will be provisionally admitted to the PhD programme. Application for final admission must be submitted no later than two months after taking up the position.

Inclusion and diversity

UiT The Arctic University of Norway is working actively to promote equality, gender balance and diversity among employees and students, and to create an inclusive and safe working environment. We believe that inclusion and diversity is a strength and we want employees with different competencies, professional experience, life experience and perspectives.

If you have a disability, a gap in your CV or immigrant background, we encourage you to tick the box for this in your application. If there are qualified applicants, we invite at least one in each group for an interview. If you get the job, we will adapt the working conditions if you need it. Apart from selecting the right candidates, we will only use the information for anonymous statistics.

Application

Your application must include:

- Application letter
- CV
- Diploma for bachelor's and master's degree
- Transcript of grades/academic record for bachelor's and master's degree
- Explanation of the grading system for foreign education (Diploma Supplement if available)
- Documentation of [English proficiency](#)
- References with contact information
- Master's thesis

You may also submit academic works which you wish us to consider during the assessment process.

Qualification with a master's degree is required before commencement in the position. If you are near completion of your master's degree, you may still apply and submit a draft version of the thesis and a statement from your supervisor or institution indicating when the degree will be obtained. You must document completion of your degree before commencement in the position. You must still submit your transcripts for the master's degree with your application.

All documentation to be considered must be in a Scandinavian language or English. Diplomas and transcripts must also be submitted in the original language, if not in English or a Scandinavian language. We only accept applications and documentation sent via Jobbnorge within the application deadline.

We offer

- Involvement in an interesting research project
- Good career opportunities
- A good academic environment with dedicated colleagues
- Flexible working hours and a state collective pay agreement
- Pension scheme through the state pension fund
- More practical information for working and living in Norway can be found here: <https://uit.no/staffmobility>

General information

The appointment is made in accordance with State regulations and guidelines at UiT. At our website, you will find more [information for applicants](#).

A shorter period of appointment may be decided when the PhD Fellow has already completed parts of their research training programme or when the appointment is based on a previous qualifying position PhD Fellow, research assistant, or the like in such a way that the total time used for research training amounts to three years.

Remuneration for the position of PhD Fellow is in accordance with the State salary scale code 1017. A compulsory contribution of 2 % to the Norwegian Public Service Pension Fund will be deducted.

We process personal data given in an application or CV in accordance with the Personal Data Act (Offentleglova). According to the Personal Data Act information about the applicant may be included in the public applicant list, also in cases where the applicant has requested non-disclosure. You will receive advance notification in the event of such publication, if you have requested non-disclosure.

UiT - Developing the High North

UiT is a multi-campus research university in Norway and the northernmost university of the world. Our central location in the High North, our broad and diverse research and study portfolio, and our interdisciplinary qualities make us uniquely suited to meet the challenges of the future. At UiT you can explore global issues from a close-up perspective.

Credibility, academic freedom, closeness, creativity and commitment shall be hallmarks of the relationship between our employees, between our employees and our students and between UiT and our partners.

Additional information

Place of service:

UiT in Tromsø 9019 Tromsø (Tromsø - Romsa Municipality)